

Fig. 1

REPLACEMENT SHEET 2
SERIAL NO.: 10/828,751
TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.

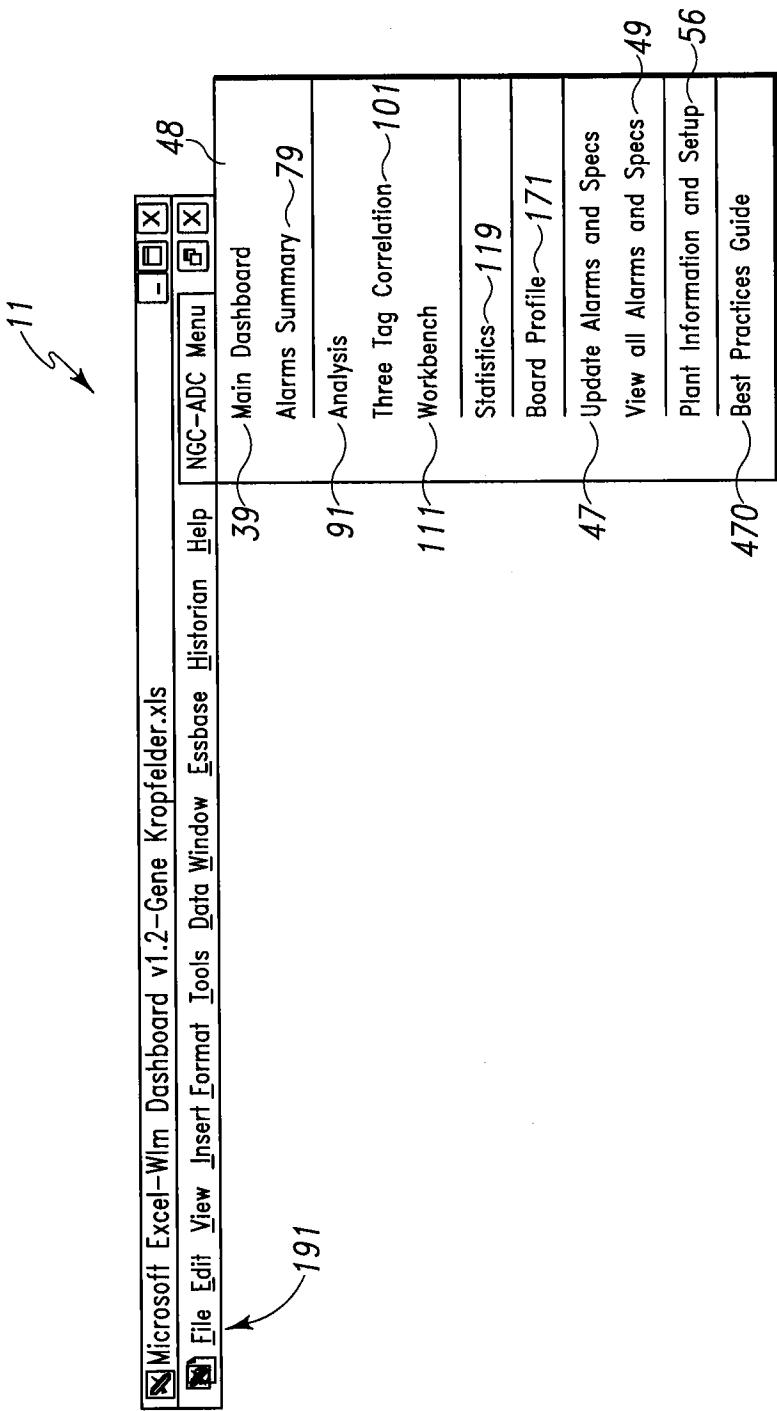


Fig. 2A

REPLACEMENT SHEET 4
 SERIAL NO.: 10/828,751
 TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
 INVENTORS: PRICE, et al.

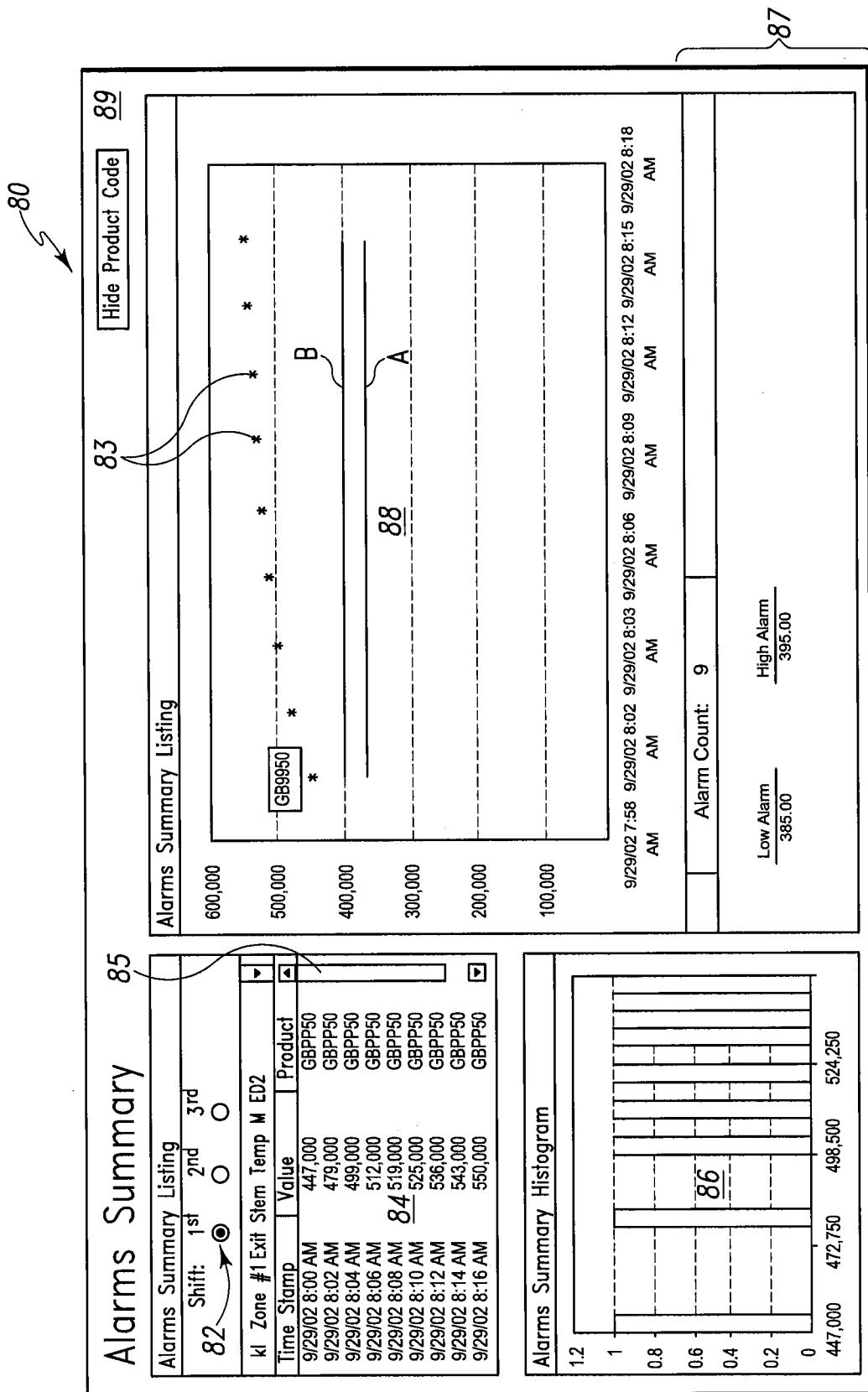


Fig. 3

46

45

Update Alarms and Specifications

<input type="button" value="UPDATE"/>	<input type="button" value="Select From"/>	<input checked="" type="radio"/> Mill Data	<input type="radio"/> West End Feeds	<input type="radio"/> West End Tests
<input type="button" value="CANCEL"/>	<input checked="" type="radio"/> All Tags	<input type="radio"/> Board Tests	<input type="radio"/> Kiln Temp/Most	<input type="radio"/> Free Tags
Select Measure/Tag				

436

ml - calcne #6 Cutlet Temp Actual 50

57

PLC Value	All	1	2	3	4	5	6	7	8	9	10	11	12	13
Product Description	All	1/2" Reg	1/2" HS	1/2" SS	1/2" SS	1/2" KK	1/2" db	1/2" PSE	1/2" SC	1/2" PSE	5/8" FS	5/8" FS	5/8" FS	5/8" FS
Product Code	All	GB4080	GB0019	GB6270	GB0116	GB2280	GB5926	GB6793	GB6601	GB6601	GB9950	GB1280	GB1310	
High Alarm	370	370	370	370	370	370	370	370	370	370	370	370	370	
Low Alarm	330	330	330	330	330	330	330	330	330	330	330	330	330	
Upper Spec Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lower Spec Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	

52

44

Fig. 4A

58

85

Fig. 4B

Product Information

		62	
PLC Value	Product Code	Description	Width (inches)
0	NONE	NO PRODUCT RUNNING	NONE
1	GB4080	1/2" REG/TE	48
2	GB0019	1/2" HS TE	48
3	GB6270	1/2" SS TE (Sta-Smooth)	48
4	GB0016	1/2" SS HS (Sta-Smooth)	48
5	GB2280	1/2" KK TE	48
6	GB5926	1/2" DB (Database)	48
7	GB6793	1/2" FSC TE	48
8	GB6601	1/2" SS HS (Sta-Smooth)	48
9	GB6058	1/2" FSC KK	48
10	GB9950	5/8" FS TE	48
11	GB1280	5/8" FS TE	48
12	GB1310	5/8" FS SS	48
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			

Shift Information

	Starts At	Ends At
1st SHIFT	8:00 AM	4:00 AM
2nd SHIFT	4:00 PM	12:00 AM
3rd SHIFT	12:00 AM	8:00 AM

Plant Information

Line	Length (Mixer to Knife) - Feet	595
Wet Transfer Length - Feet	30	
Kiln Length - Feet	413	
Number of Decks in Kiln	8	
Kiln Zone 1 Length - Feet	121	
Kiln Zone 2 Length - Feet	67	
Kiln Zone 3 Length - Feet	205	
Kiln Zone 4 Length - Feet		

Fig. 5

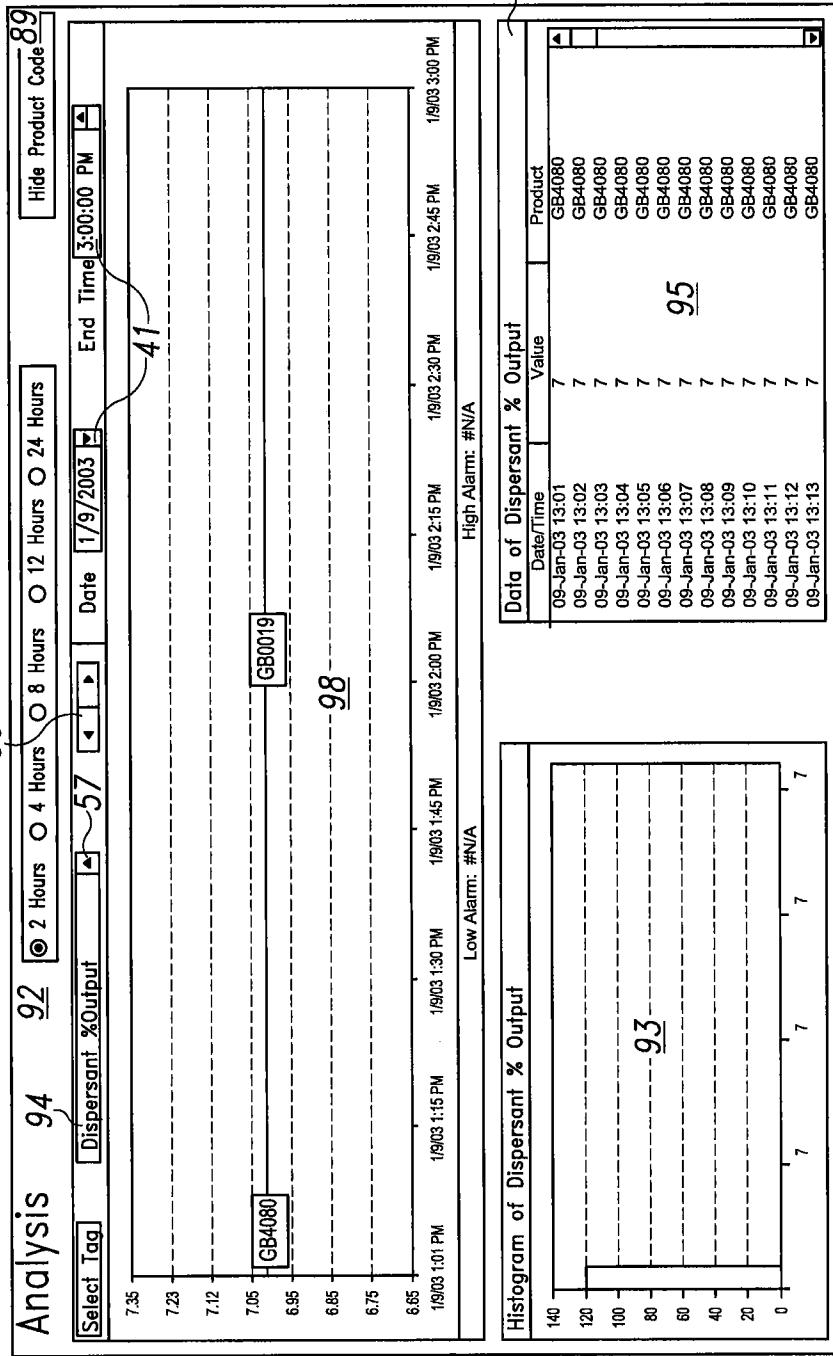
66 64 68 70 76

60

REPLACEMENT SHEET 8
SERIAL NO.: 10/828,751

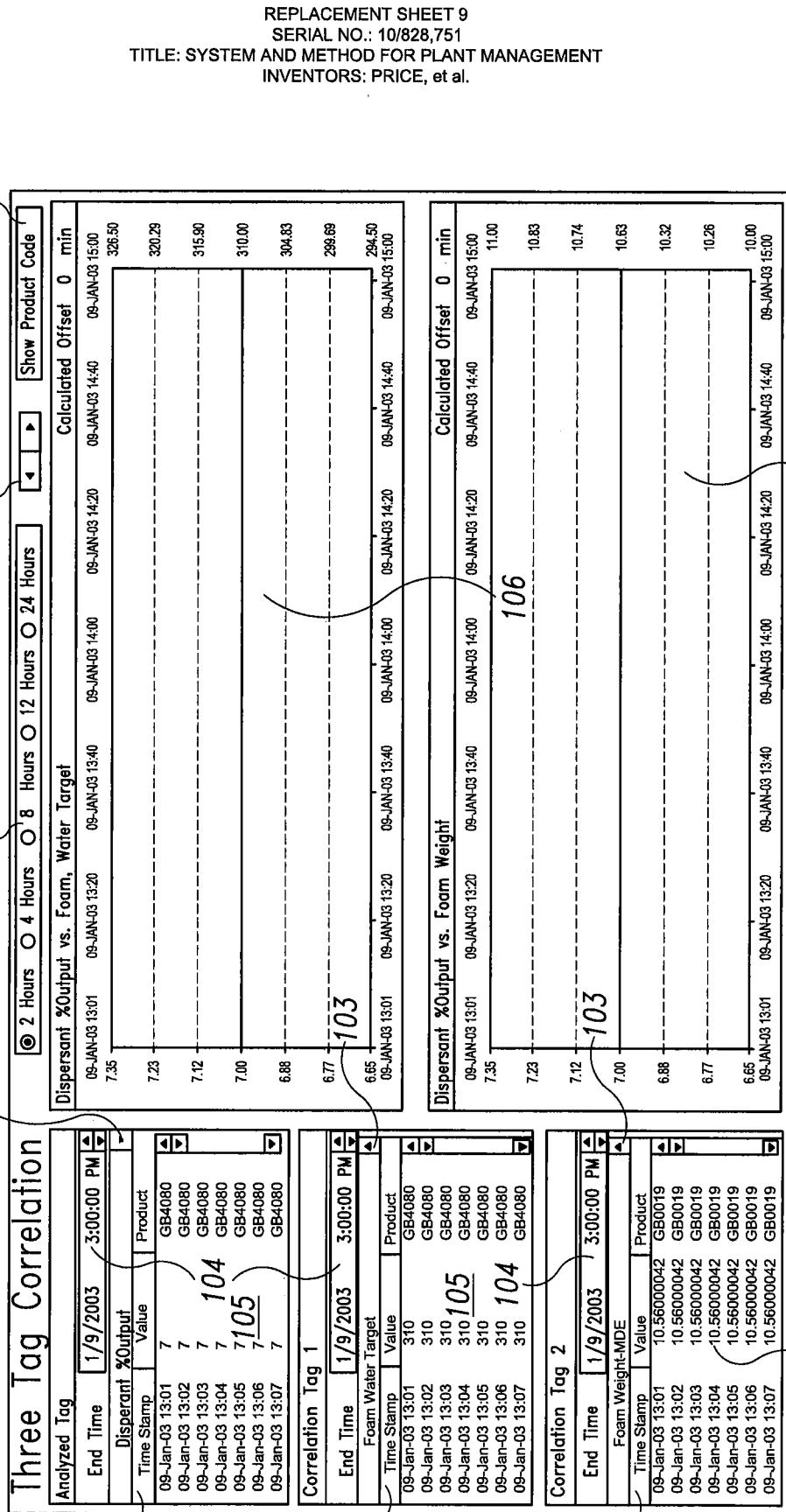
60

69



99

Fig. 6



100
102
92
108
109
109
89
96
103
105
106
105
Fig. 7

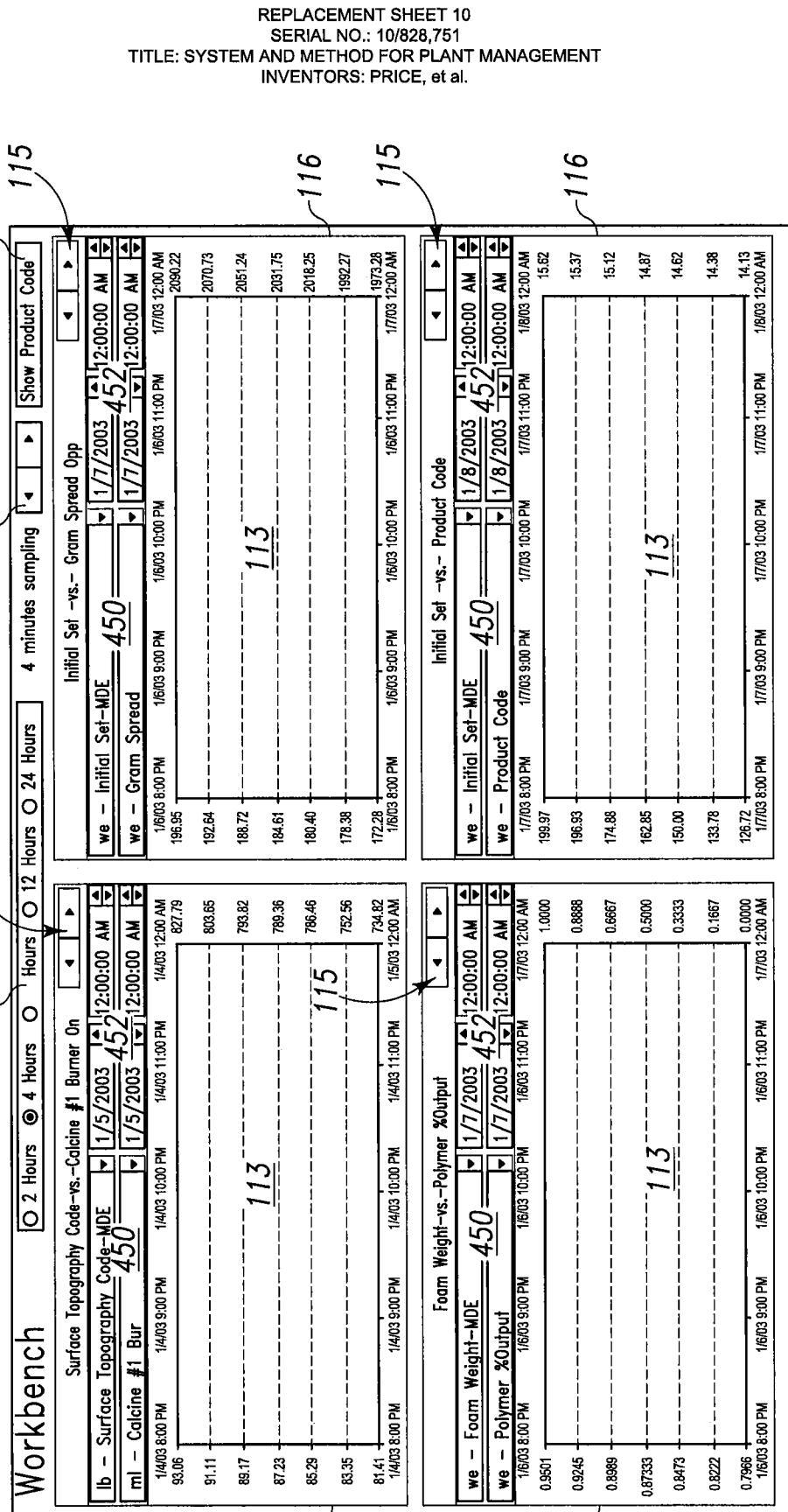


Fig. 8

REPLACEMENT SHEET 11

SERIAL NO.: 10/828,751

TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.

170 → 188

460

Board Profile CALIPER DISPLAY MODE
 Code To Opp Opp To Code
 Sample Time Found 9/12/02 1:00 PM

KNIFE CALIPER Sample Time Found 9/12/02 1:00 PM

0.55
0.525
0.5
0.475
0.45
0.426

0.4
Code 3" 6" 9" 12" 15" 18" 21" 24" 27" 30" 33" 36" 39" 42" 45" Opp
 Actual 0.440 0.488 0.487 0.487 0.490 0.492 0.490 0.492 0.487 0.491 0.492 0.493 0.494 0.495 0.493 0.491
 Low 0.425 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.491
 High 0.445 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.491

Width 47.97
Weight 2375.0

Taper Width
 Code 2.375
Opp 2.25

Taper Depth
 Code 0.047
Opp 0.048

Edge Angle
 Code 90
Opp 91

Differential Measures
 Edge -0.005
Shoulder -0.003
Code<Opp
Code>Opp

Board Profile CALIPER DISPLAY MODE
 Code To Opp Opp To Code
 Sample Time Found 9/12/02 1:00 PM

KNIFE CALIPER Sample Time Found 9/12/02 1:00 PM

0.55
0.525
0.5
0.475
0.45
0.426

0.4
Code 3" 6" 9" 12" 15" 18" 21" 24" 27" 30" 33" 36" 39" 42" 45" Opp
 Actual 0.441 0.489 0.489 0.490 0.491 0.492 0.490 0.491 0.491 0.492 0.493 0.494 0.494 0.493 0.490 0.491
 Low 0.425 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.485 0.491
 High 0.445 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.515 0.491

Width 47.97
Weight 1437.5
Water Less 937.5

Taper Width
 Code 2.375
Opp 2.25

Taper Depth
 Code 0.048
Opp 0.048

Edge Angle
 Code 90
Opp 90

Differential Measures
 Edge -0.004
Shoulder -0.001
Code<Opp
Code>Opp

182 → 186

186

178

174

172

178

176

178

174

172

178

178

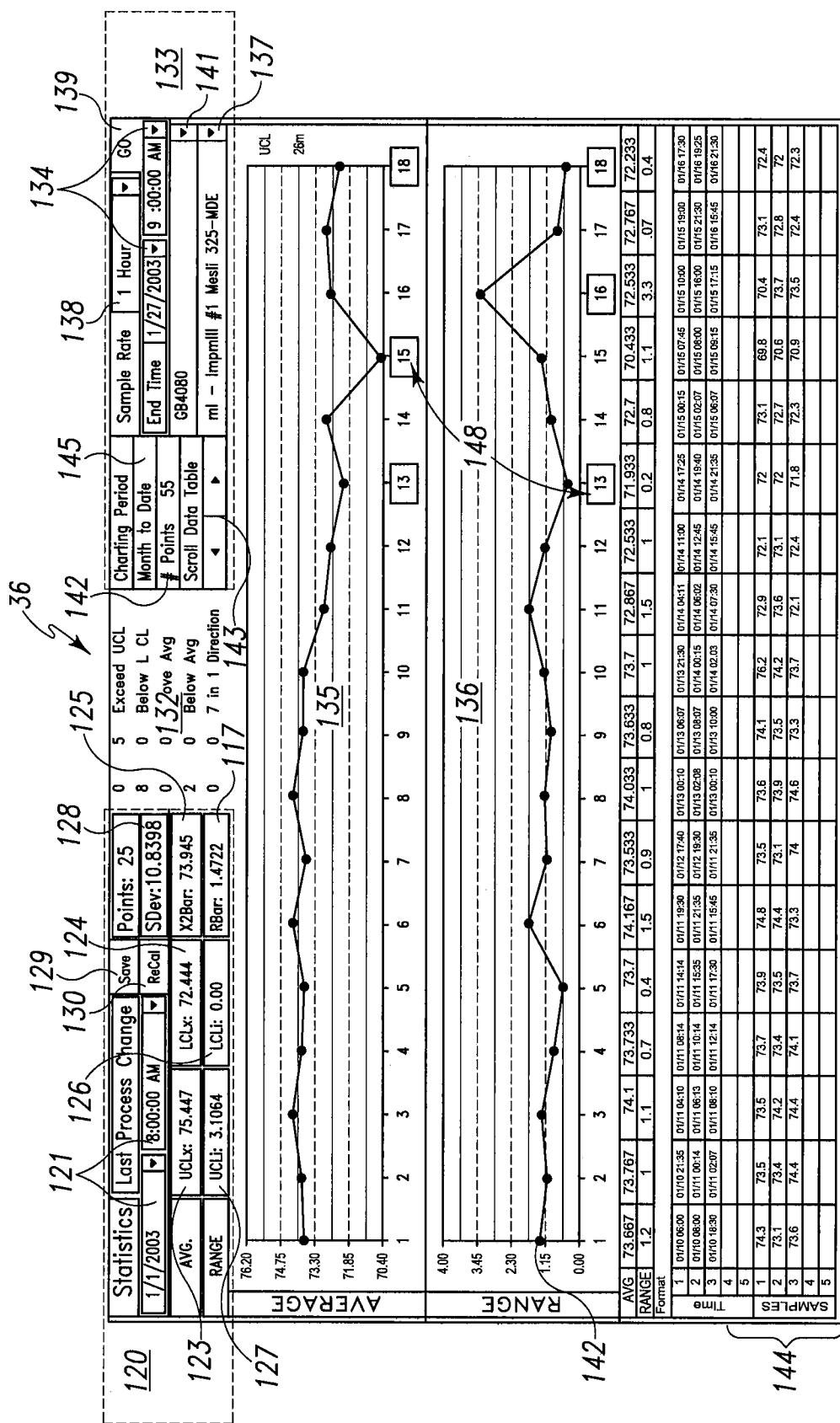
184

Fig. 9

REPLACEMENT SHEET 12

SERIAL NO.: 10/828,751

TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.



144

Fig. 10

REPLACEMENT SHEET 13
SERIAL NO.: 10/828,751
TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.

SPC Reasons and Actions					
Time Stamp	Value	Reason Code	Description	Corrective Active Code	Previous Reasons/Actions
1/7/03 9:11 AM	73.6	156	158	160	162
1/7/03 10:30 AM	73.7	156	158	160	162
1/7/03 12:30 AM	69.9	156	158	160	162
You can type over the description for codes ending with -9999.		-9999 ML-0000 ML-0011 ML-0042 ML-9999	Data entry error 325 Mesh too fine 325 mesh too coarse Other (You can type text over me)	160	168

152 → 154 → 156 → 158 → 160 → 162 → 168

169 → 164 → 167 → Save

Cancel → Best Practices Guide

Use the dropdowns to select the Reason/Action Code from the valid list of codes.

Fig. 11A.

REPLACEMENT SHEET 14
 SERIAL NO.: 10/828,751
 TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
 INVENTORS: PRICE, et al.

152 → *m1 - Impmill #1 Mesh 325-MDE*

Time Stamp	Value	Reason Code	Reason Description	Corrective Active Code	Corrective Description	Previous Reasons/Actions
1/14/03 5:25 PM	72	154	→ <i>ML-9999: This is a test for MDE SPC 3/5/2003 8:33:17 AM</i>	160	→ <i>ML-9999-1: This is a test for MDE SPC 3/5/2003 8:33:17 AM</i>	162
1/14/03 7:40 PM	72					168
1/14/03 9:35 PM	71.8					

150 → *SPC Reasons and Actions*

Time Stamp	Value	Reason Code	Reason Description	Previous Actions	Close
1/14/03 5:25 PM	72	154	→ <i>ML-9999: This is a test for MDE SPC 3/5/2003 8:33:17 AM</i>	→ <i>ML-9999-1: This is a test for MDE SPC 3/5/2003 8:33:17 AM</i>	→ <i>ML-9999-1: This is a test for MDE SPC 3/5/2003 8:33:17 AM</i>
1/14/03 7:40 PM	72				
1/14/03 9:35 PM	71.8				

Buttons:

Fig. 11B

The goal of this SOP is to produce stucco that is calcined below theoretical with as few adjustments as possible.

BEST PRACTICE/S.O.P.

166

1. Combined water of stucco exceeds the upper limit.

Make sure the grinds are in the reasonable limits.

(Course grounds will cause the moistures to go up)

Examine the history of previous moisture's.

(2 samples in a row high or most of the samples were high)

Examine the purity.

(If the purity went up quite a bit, the moisture's will get higher)

If the grinds are out of the control limits, they need to be lined out before any adjustments are made to the calcidyne's.

If grinds are in the control limits and purity is stable and sample still exceeds the upper limits then an adjustment to the calcidyne needs to be made.

When the purity goes up, it may take some time for the calcidyne's to adjust, no need to make adjustments right away. Run a couple of samples and see if they will adjust by themselves. If not make an adjustment.

2. Combined water of stucco is less than the lower limit.

Make sure the grinds are in the reasonable limits.

(Fine grinds will cause the moistures to go down)

Examine the history of previous moisture's.

(2 samples in a row low or most of the samples were low)

Examine the purity.

(If the purity went down quite a bit, the moisture's will get lower.)

If the grinds are out of the control limits, they need to be lined out before any adjustments are made to the calcidyne's.

If grinds are in the control limits and purity is stable and sample still exceeds the lower limits then an adjustment to the calcidyne needs to be made.

192 →

Quality Report Login Screen

194
Open File

189
Enter Password:
Required to Change Plant/Server
Required to Activate the Open File Button, if a Corporate User.
Enter Password

195
Select Plant:
Apollo Beach

197
Select Server:
Corporate
Select Plant Only if you are at the plant.
Select Corporate only if you are located in Charlotte, or you need to access a plant server other than your own.
The Selected Server Is
HQADC
199

Fig. 13

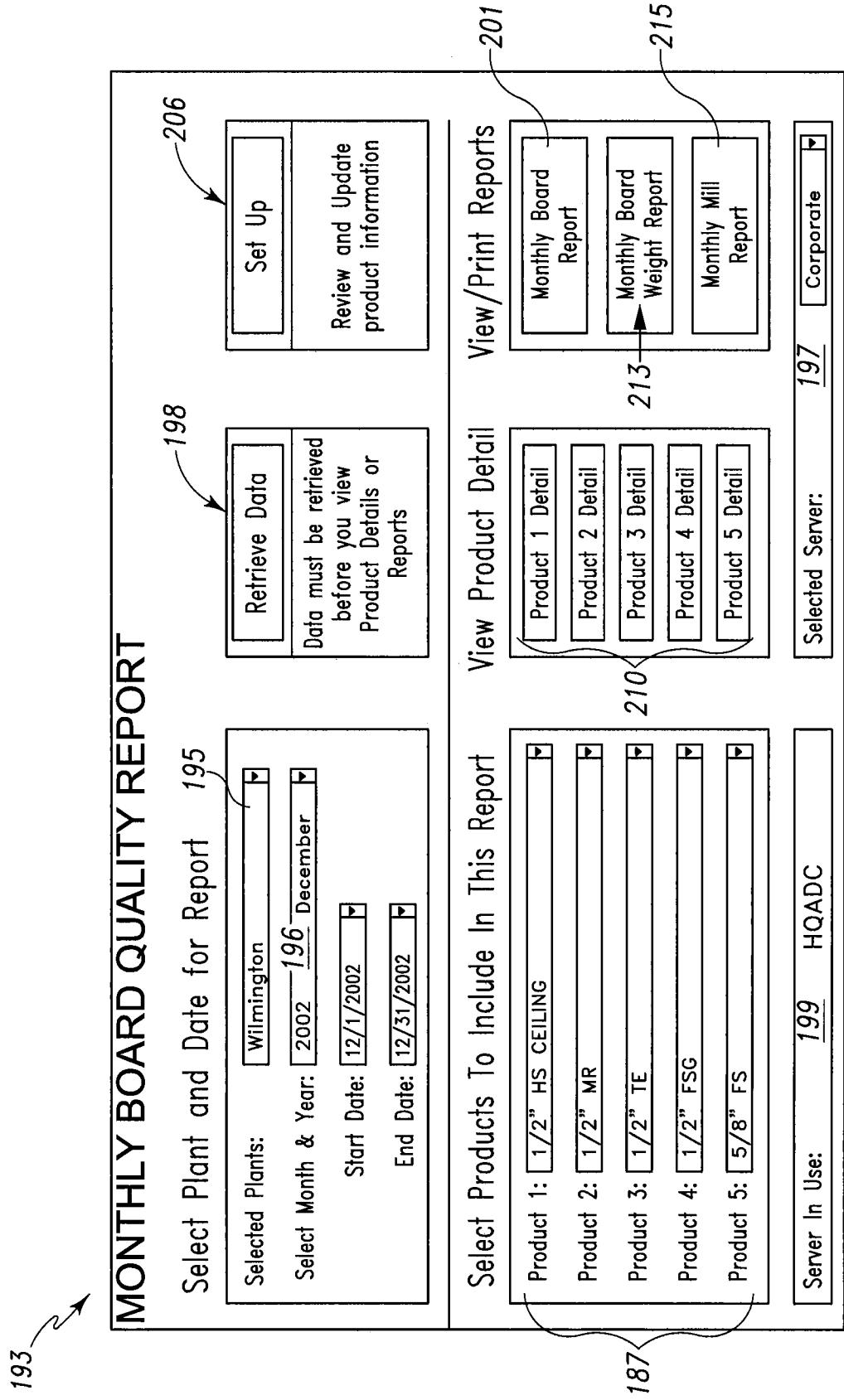


Fig. 14

REPLACEMENT SHEET 18
 SERIAL NO.: 10/828,751
 TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
 INVENTORS: PRICE, et al.

MONTHLY BOARD QUALITY REPORT

200

401 401 401 401 401

PRODUCT CODE AND DESCRIPTION	402	GB4080 1/2" REG TE	GB9950 5/8" FS TE	GB2280 1/2" KK TE	GB0019 1/2" HS TE	GB0116 1/2" SS HS (Sta-Smooth)
------------------------------	-----	-----------------------	----------------------	----------------------	----------------------	-----------------------------------

Lab	NAIL PULL - lbs of force				
Number of samples	75	22	1	9	4
Specification (Min)	80.0	90.0	80.0	80.0	80.0
3-Month Rolling Average	71.4	84.8	82.1	70.6	70.9
Standard Deviation	2.722	4.458		2.985	3.081
Year-to-Date Average	71.4	84.8	82.1	70.6	70.9
Prior Year Average	74.886	89.838	85.750	77.067	76.100
Cpk	-1.049	-0.391		-1.046	-0.990
Est. Defects per 1,000 Units	>500	500		>500	>500
Cp	-1.049	-0.391		-1.046	-0.990

Lab	CORE HARDNESS - lbs of force				
Number of samples	68	21	1	9	4
Specification (Min)	15.0	15.0	15.0	15.0	15.0
3-Month Rolling Average	17.1	23.0	19.3	17.1	16.3
Standard Deviation	1.366	1.750		1.054	0.831
Year-to-Date Average	17.1	23.0	19.3	17.1	16.3
Prior Year Average	18.276	23.056	17.333	18.389	16.889
Cpk	0.518	1.514		0.668	0.535
Est. Defects per 1,000 Units	80	<1		40	80
Cp	0.518	1.514		0.668	0.535

Lab	EDGE HARDNESS - CODE - lbs of force				
Number of samples	67	21	1	8	4
Specification (Min)	15.0	15.0	15.0	15.0	15.0
3-Month Rolling Average	56.1	72.4	64.3	56.5	51.7
Standard Deviation	4.725	9.285		6.644	7.193
Year-to-Date Average	56.1	72.4	64.3	56.5	51.7
Prior Year Average	42.430	64.194	55.000	43.845	47.000
Cpk	2.900	2.061		2.080	1.703
Est. Defects per 1,000 Units	<1	<1		<1	<1
Cp	2.900	2.061		2.080	1.703

Lab	EDGE HARDNESS - OPP CODE - lbs of force				
Number of samples	66	21	1	8	4
Specification (Min)	15.0	15.0	15.0	15.0	15.0
3-Month Rolling Average	62.1	75.0	79.3	57.7	62.7
Standard Deviation	5.351	7.700		4.366	0.837
Year-to-Date Average	62.1	75.0	79.3	57.7	62.7
Prior Year Average	49.159	60.030	62.222	46.282	47.000
Cpk	2.934	2.599		3.261	19.016
Est. Defects per 1,000 Units	<1	<1		<1	<1
Cp	2.934	2.599		3.261	19.016

Lab	END HARDNESS - lbs of force				
Number of samples	69	21	1	9	4
Specification (Min)	15.0	15.0	15.0	15.0	15.0
3-Month Rolling Average	16.1	22.2	20.3	16.4	15.2
Standard Deviation	1.385	1.798		0.961	0.638
Year-to-Date Average	16.1	22.2	20.3	16.4	15.2
Prior Year Average	17.829	22.528	18.000	18.028	16.889
Cpk	0.255	1.336		0.488	0.087
Est. Defects per 1,000 Units	300	<1		120	>500
Cp	0.255	1.336		0.488	0.087

Fig. 15

214

MONTHLY BOARD WEIGHT REPORT			
PLANT: <u>Wilmington</u>	MONTH: <u>February 2003</u>	MONTHLY WEIGHT DATA	
Board	Avg Weight	Std Dev	# of Samples
December 2002	1719	9	2
January 2003	1713	16	6
February 2003			
March 2003			
April 2003			
May 2003			
June 2003			
July 2003			
August 2003			
September 2003			
October 2003			
November 2003			
December 2003			
YTD AVERAGE	1713	16	6

431 430

Fig. 16

Product Data

405
407
408
409

208
Return

PLC Value	406 Description	Product Code	Width	Speed	STD	STD	STD-20-Hr Humidified Bond	STD-20-Hr Humidified Bond	Go Live Date
0	NO PRODUCT RUNNING	NONE	NA	NA	NA	NA	NA	NA	6/1/02 12:00 AM
1	3/8" TE	GB3990	48"	48"					
2	1/2" TE	GB8000	48"	48"					
3	1/2" KK	GB5620	48"	48"					
4	1/2" FSG	GB6793	48"	48"					
5	1/2" MR	GB3760	48"	48"					
6	1/2" KK FS	GB1242	48"	48"					
7	1/2" HS CEILING	GB0019	48"	48"					
8	1/2" SS (STA SMOOTH)	GB6270	48"	48"					
9	1/2" SHEATHING	GB8000	48"	48"					
10	5/8" FS	GB9950	48"	48"					
11	5/8" MR FS	GB1400	48"	48"					
12	5/8" KK FS	GB1050	48"	48"					
13	5/8" FS JS	GB9486	48"	48"					
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									

Fig. 17

REPLACEMENT SHEET 21
 SERIAL NO.: 10/828,751
 TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
 INVENTORS: PRICE, et al.

Transverse									
Face Down									
Face Up									
	Opp Code	Opp Depth	Opp Code	Opp Hardness	Opp Code	Opp Hardness	Opp Code	Opp Hardness	Opp Code
	Caliper	Board Width	Code	Core	Core	Core	Code	End	d
Save As File	Machine Speed	Dry Weight	Wet Weight	Water Loss	Board Width	Opp Code	Caliper	Nail Pull	Face Up MO
January 2003									
Monthly Information									
Count	1339	272	328	25	272	271	25	3	0
January 2003	180.7	1714	25	801	48.00	0.056	0.490	77.1	21.2
Daily Information									
January 1, 2003									
January 2, 2003	181.8	1732	2505	773	48.00	0.055	0.491		
January 3, 2003	182.0	1713	2513	801	48.00	0.054	0.491	75.2	
January 4, 2003	182.0	1688.2	1698	2468	770	48.00	0.049	0.491	
January 5, 2003	181.8	1718	2478	760	48.00	0.053	0.092	88.0	
January 6, 2003	181.8	1718	2478	790	48.00	0.049	0.059	0.490	74.4
January 7, 2003	181.7	1670	2461	761	48.00	0.059	0.061	0.491	77.7
January 8, 2003	181.8	1718	2479	782	48.00	0.052	0.060	0.495	74.0
January 9, 2003	181.6	1709	2452						
January 10, 2003									
January 11, 2003	169.7	1721	2486	765	48.00	0.054	0.053	0.487	
January 12, 2003	181.8	1716	2489	773	48.00	0.045	0.049	0.489	82.0
January 13, 2003	182.1	1728	2516	789	47.99	0.054	0.056	0.490	76.7
January 14, 2003	181.9	1715	2535	820	47.98	0.061	0.058	0.491	76.7
January 15, 2003	181.8	1713	2534	821	48.00	0.060	0.062	0.495	
January 16, 2003	177.7	1703	2505	802	48.00	0.063	0.062	0.489	
January 17, 2003	181.7	1734	2567	833	48.00	0.063	0.053	0.490	76.2
January 18, 2003									
January 19, 2003	177.9	1709	2533	823	47.99	0.060	0.046	0.487	
January 20, 2003	182.1	1706	2504	798	48.00	0.053	0.046	0.490	78.9
January 21, 2003	181.0	1709	2537	828	48.00	0.048	0.047	0.491	74.8
January 22, 2003	179.8	1718	2553	836	48.00	0.052	0.055	0.489	79.2
January 23, 2003	180.9	1719	2535	815	47.99	0.055	0.062	0.492	81.0
January 24, 2003	182.0	1725	2547	822	47.98	0.066	0.066	0.493	85.6
January 25, 2003									
January 26, 2003	178.5	1722	2524	802	47.99	0.067	0.058	0.489	73.3
January 27, 2003	182.0	1718	2515	798	48.00	0.055	0.065	0.488	70.6
January 28, 2003	181.7	1715	2524	809	48.00	0.061	0.055	0.489	77.0
January 29, 2003	181.8	1708	2541	833	47.99	0.058	0.061	0.491	66.6
January 30, 2003	181.5	1713	2537	824	48.00	0.049	0.056	0.491	49.50
January 31, 2003									

212 → 431
 430 → 44
 44

Fig. 18A

REPLACEMENT SHEET 22
 SERIAL NO.: 10/828,751
 TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
 INVENTORS: PRICE, et al.

	Machine Speed	Dry Weight	Wet Weight	Water Loss	Board Width	Taper Depth			Caliper	Nail Pull	Core Hardness	Edge Hardness			Transverse		
						Code	Opp Code	Caliper				Code	Opp Code	End Hardness	d Defects	Face Up MO	Face Down
February 2003																	
3-Month Rolling Avg																	
Average	180.6	420	2511	800	47.997	0.057	0.056	0.490	77.5	21.8	28.8		19.0	0.128	48	50	
Number of Samples	2931		645	54	593	587	588	593	49	3	3	0	3	28	49	49	
LSL					47.29/32	0.050	0.050	0.485	80	15.0	15.0	15.0			40	40	
USL					48	0.090	0.090	0.515						1.250			
Std Dev	3.484	55.983	45.956	33.603	0.016	0.020	0.017	0.004	4.387	1.072	1.411		0.882	0.025	4.442	3.550	
Std Dev / 1.7321	2.000	31.987	26.533	19.400	0.009	0.011	0.010	0.002	2.533	0.619	1.392		0.509	0.014	1.584	2.050	
Cpku					0.115	0.948	1.176	3.890						26.366			
CpkL					3.230	0.217	0.222	0.829	-0.334	3.652	3.299		2.619		1.037	1.866	
Cpk					0.115	0.217	0.222	0.829	-0.334	3.652	3.299		2.619	26.366	1.037	1.866	
Cp					1.673	0.583	0.699	2.359	-0.334	3.652	3.299		2.619	26.366	1.037	1.866	
3-Month Period Ending	181.1	1712	2509	796	48.00	0.058	0.056	0.490	77.5	21.8	28.8		19.0	0.128	48	50	
January	180.6		2511	800	4800	0.057	0.056	0.490	77.5	21.8	28.8		19.0	1.128	48	50	
February	179.9	421	2517	807	48.00	0.058	0.057	0.491	77.5	21.2	30.2		19.2	1.117	51	51	
March	177.0		2527	635	48.00	0.053	0.057	0.492									
April																	
May																	
June																	
July																	
August																	
September																	
October																	
November																	
December																	

Fig. 18B

	Machine Speed	Dry Weight	Wet Weight	Water Loss	Board Width	Taper Depth			Caliper	Nail Pull	Core Hardness	Edge Hardness			Transverse		
						Code	Opp Code	Caliper				Code	Opp Code	End Hardness	d Defects	Face Up MO	Face Down
Current Year Info																	
Year-to-date Avg	179.9	1710	2517	807	48.00	0.056	0.057	0.491	77.1	21.2	30.2		19.2	0.117	51	51	
Entire Year Avg	179.9	422	2517	807	48.00	0.056	0.057	0.491	77.1	21.2	30.2		19.2	0.117	51	51	
December (Last Year)	181.5	1411	2502	791	48.00	0.060	0.056	0.490	77.8	23.0	26.0		18.7	0.133	45	49	
January	180.7	1714	2515	801	48.00	0.056	0.056	0.490	77.1	21.2	30.2		19.2	0.117	51	51	
February	177.0	1692	2527	835	48.00	0.053	0.057	0.492									
Prior Year Info																	
Overwrite Historian Data																	
Enter Year Avg																	
Historian Data																	
Entire Year Avg	176.1	422	2502	791	48.00	0.060	0.056	0.490	77.8	23.0	26.0		18.7	0.133	45	49	
Year-to-date Avg																	
Entire Year Avg	176.1	1714	2502	791	48.00	0.060	0.056	0.490	77.8	23.0	26.0		18.7	0.133	45	49	

424

Fig. 18C

Fig. 19

REPLACEMENT SHEET 23

SERIAL NO.: 10/828,751

TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT

INVENTORS: PRICE, et al.

Select Starting Date and Time:						
February 25, 2003				12:00 AM		
<input type="button" value="◀"/> February 2003 <input type="button" value="▶"/>				<input type="button" value="12:00 AM"/> <input type="button" value="▼"/>		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	1
2	3	4	5	6	7	8
Today: 2/25/2003						
<input type="button" value="Average"/> <input type="button" value="Standard Deviation"/>						
Date / Time						
2/25/03 12:00 AM	Running			12:00 AM		
2/25/03 12:15 AM	Running			1:00 AM		
2/25/03 12:15 AM	Running			2:00 AM		
2/25/03 12:15 AM	Running			3:00 AM		
2/25/03 1:00 AM	Running			4:00 AM		
2/25/03 1:15 AM	Running			5:00 AM		
2/25/03 1:30 AM	Running			6:00 AM		
2/25/03 1:45 AM	Running			7:00 AM		
2/25/03 2:00AM	Running			8:00 AM		
				9:00 AM		
				10:00 AM		
				11:00 AM		
				12:00 PM		
				1:00 PM		
				2:00 PM		
				3:00 PM		
				4:00 PM		
				5:00 PM		
				6:00 PM		
				7:00 PM		
				8:00 PM		
				9:00 PM		
				10:00 PM		
				11:00 PM		

252

253

Fig. 20A

255

Apollo
Baltimore 1
Baltimore 2
Burlington
Fort Dodge
Long Beach
Lorain
Medicine Lodge 1
Medicine Lodge 2
National City
Phoenix
Portsmouth
Rensselaer
Richmond
Rotan
Savannah
Shippingport
Shoals
Tampa 1
Tampa 2
Waukegan
Westwego
Wilmington

Fig. 20B

Select Period / Frequency

256

Select Period/Frequency:

1 Day - Every 15 Minutes	▼
1 Day - Every 15 Minutes	
1 Day - Every 30 Minutes	
1 Day - Every Hour	
1 Day - Every 2 Hours	
1 Week - Every 2 Hours	
1 Week - Every 4 Hours	
1 Week - Every 8 Hours	
1 Week - Every 12 Hours	
1 Month - Every 8 Hours	
1 Month - Every 12 Hours	
1 Month - Every Day	

Fig. 20C

Select Server

257

Select Server

Corporate Server	▼
Corporate Server	
Plant Server	

If you are at a plant, you should select Plant Server.
 Likewise, if you are in Charlotte, you should select Corporate Server.

Fig. 20D

Select Measures (Tags)

258

WE	KF	DE	KF	DE	KF	DE	KF
----	----	----	----	----	----	----	----

WE Product Code

WE Product Code Test	Caliper Average
WE Pulp %Output	
WE Pulp Actual	
WE Pulp Feed Tank Level Gals	
WE Pulp Target	
WE Pulper Batch Actual	
WE Pulper Batch Potash Actual	
WE Pulper Batch Potash Target	
WE Pulper Batch Starch Actual	
WE Pulper Batch Starch Target	
WE Pulper Batch Target	
WE Pulper Batch Time Remaining	
WE Pulper Batch Time Target	
WE Pulper Batch Waste Water Actual	

Fig. 20E

REPLACEMENT SHEET 27

SERIAL NO.: 10/828,751

**TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.**

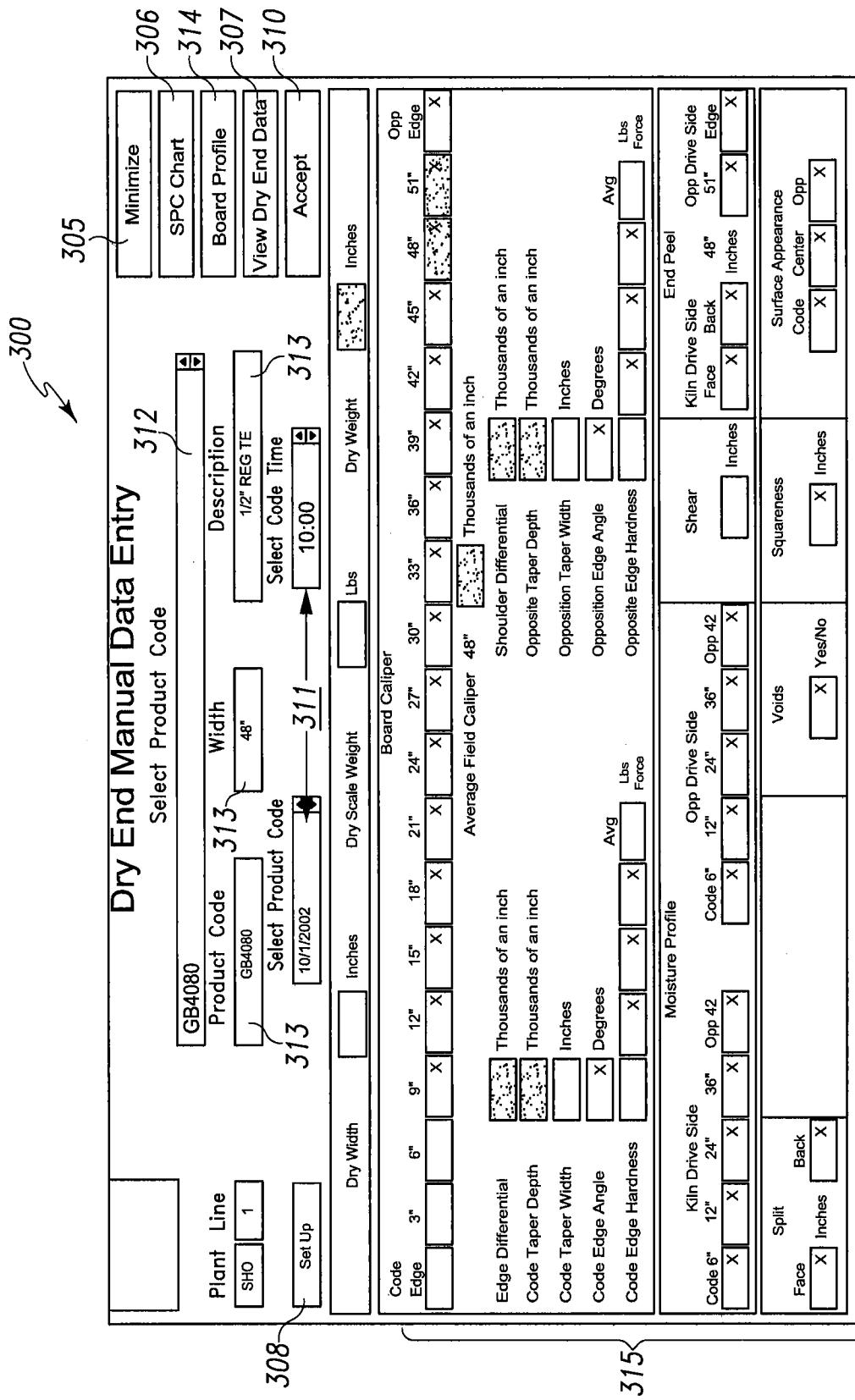


Fig. 21

Fig. 22

REPLACEMENT SHEET 28
SERIAL NO.: 10/828,751
TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.

Mill Manual Data Entry					
Select Date Time:		10/1/2002	311	10:00:00 AM	Plant: SHO
Set Up		<input type="checkbox"/> Minimize <input type="checkbox"/> SPC Chart <input type="checkbox"/> View Mill Data <input type="checkbox"/> Accept			
Rock FGD		Purity <input type="checkbox"/> % <input type="checkbox"/> %	Free Water <input type="checkbox"/> X <input type="checkbox"/> X	Calcination <input type="checkbox"/> X	
Raymond Mill #1		100 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%	325 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%	Raymond Mill #2 <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%	100 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%
Raymond Mill #3				Raymond Mill #4 <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%	325 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%
Raymond Mill #5				Raymond Mill #6 <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%	
Raymond Mill #7					
Composite Land Plaster		Refry Comb H ₂ O <input type="checkbox"/> X% <input type="checkbox"/> X%	Purity <input type="checkbox"/> X% <input type="checkbox"/> X%	Refry Calcination <input type="checkbox"/> X% <input type="checkbox"/> X%	100 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X%
Calcydine #1		Combined H ₂ O <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%		Calcydine #1 <input type="checkbox"/> X% Calcydine #3 <input type="checkbox"/> X% Calcydine #5 <input type="checkbox"/> X%	325 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X% <input type="checkbox"/> X%
Calcydine #3				Combined H ₂ O <input type="checkbox"/> X% Combined H ₂ O <input type="checkbox"/> X% Combined H ₂ O <input type="checkbox"/> X%	
Calcydine #5				Combined H ₂ O <input type="checkbox"/> X% Combined H ₂ O <input type="checkbox"/> X% Combined H ₂ O <input type="checkbox"/> X%	
Composite Calcined Stucco		Combined Water <input type="checkbox"/> X% Gilmore 1/4# Set <input type="checkbox"/> X/mm:ss		Consistency Gilmore 1# Final Set <input type="checkbox"/> X/ml/100 grams <input type="checkbox"/> X/mm:ss	
Imp Mill #1		100 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X%	Combined H ₂ O <input type="checkbox"/> X% <input type="checkbox"/> X%	100 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X%	325 Mesh <input type="checkbox"/> X% <input type="checkbox"/> X%
Imp Mill #3				Imp Mill #2 <input type="checkbox"/> X% <input type="checkbox"/> X%	
Composite Imp Mill Stucco		Combined Water <input type="checkbox"/> X% Gilmore 1/4# Set <input type="checkbox"/> X/mm:ss 100 Mesh <input type="checkbox"/> X%		Consistency Gilmore 1# Final Set <input type="checkbox"/> X/ml/100 grams <input type="checkbox"/> X/mm:ss 325 Mesh <input type="checkbox"/> X%	Combined H ₂ O <input type="checkbox"/> X% <input type="checkbox"/> X%

302

305

308

315

306

314

307

310

312

Wet End Manual Data Entry

Plant SHO Line 1	Select Product: GB4080	Product Code: GB4080	Width 48"	Desc 1/2" REG TE	311																																																		
Select Date & Time 10/1/2002 10:00:00 AM					311																																																		
<input type="button" value="Set Up"/> <input type="button" value="Print Page"/>																																																							
<table border="1"> <tr> <td>Cylinder Weight</td> <td>Code</td> <td>Gram</td> <td>Spread</td> <td>Code</td> <td>grams</td> </tr> <tr> <td>Cylinder Weight</td> <td>Field</td> <td>Gram</td> <td>Spread</td> <td>Opp</td> <td>grams</td> </tr> <tr> <td>Cylinder Weight</td> <td>Opp</td> <td>Gram</td> <td></td> <td></td> <td></td> </tr> </table> <table border="1"> <tr> <td>Initial Set (TTU)</td> <td>mm:ss</td> <td>Field Set</td> <td>mm:ss</td> </tr> <tr> <td>Gilmore (TTU) Set</td> <td>mm:ss</td> <td>Gilmore 1# Final Set</td> <td>mm:ss</td> </tr> <tr> <td>Slump</td> <td>mm:ss</td> <td></td> <td></td> </tr> </table> <table border="1"> <tr> <td>Boat Temperature</td> <td>%</td> <td>Differential</td> <td>Boat-Head</td> <td>mm:ss</td> </tr> <tr> <td>Head Temperature</td> <td>%</td> <td></td> <td></td> <td>mm:ss</td> </tr> </table> <table border="1"> <tr> <td>Stucco Combined Water</td> <td>%</td> <td>Stucco Consistency</td> <td>ml/100 grams</td> <td>mm:ss</td> </tr> <tr> <td>Foam Weight</td> <td>mm:ss</td> <td>H2O/Stucco Ratio</td> <td>mm:ss</td> <td></td> </tr> </table>						Cylinder Weight	Code	Gram	Spread	Code	grams	Cylinder Weight	Field	Gram	Spread	Opp	grams	Cylinder Weight	Opp	Gram				Initial Set (TTU)	mm:ss	Field Set	mm:ss	Gilmore (TTU) Set	mm:ss	Gilmore 1# Final Set	mm:ss	Slump	mm:ss			Boat Temperature	%	Differential	Boat-Head	mm:ss	Head Temperature	%			mm:ss	Stucco Combined Water	%	Stucco Consistency	ml/100 grams	mm:ss	Foam Weight	mm:ss	H2O/Stucco Ratio	mm:ss	
Cylinder Weight	Code	Gram	Spread	Code	grams																																																		
Cylinder Weight	Field	Gram	Spread	Opp	grams																																																		
Cylinder Weight	Opp	Gram																																																					
Initial Set (TTU)	mm:ss	Field Set	mm:ss																																																				
Gilmore (TTU) Set	mm:ss	Gilmore 1# Final Set	mm:ss																																																				
Slump	mm:ss																																																						
Boat Temperature	%	Differential	Boat-Head	mm:ss																																																			
Head Temperature	%			mm:ss																																																			
Stucco Combined Water	%	Stucco Consistency	ml/100 grams	mm:ss																																																			
Foam Weight	mm:ss	H2O/Stucco Ratio	mm:ss																																																				

Fig. 23

REPLACEMENT SHEET 30
SERIAL NO.: 10/828,751

TITLE: SYSTEM AND METHOD FOR PLANT MANAGEMENT
INVENTORS: PRICE, et al.

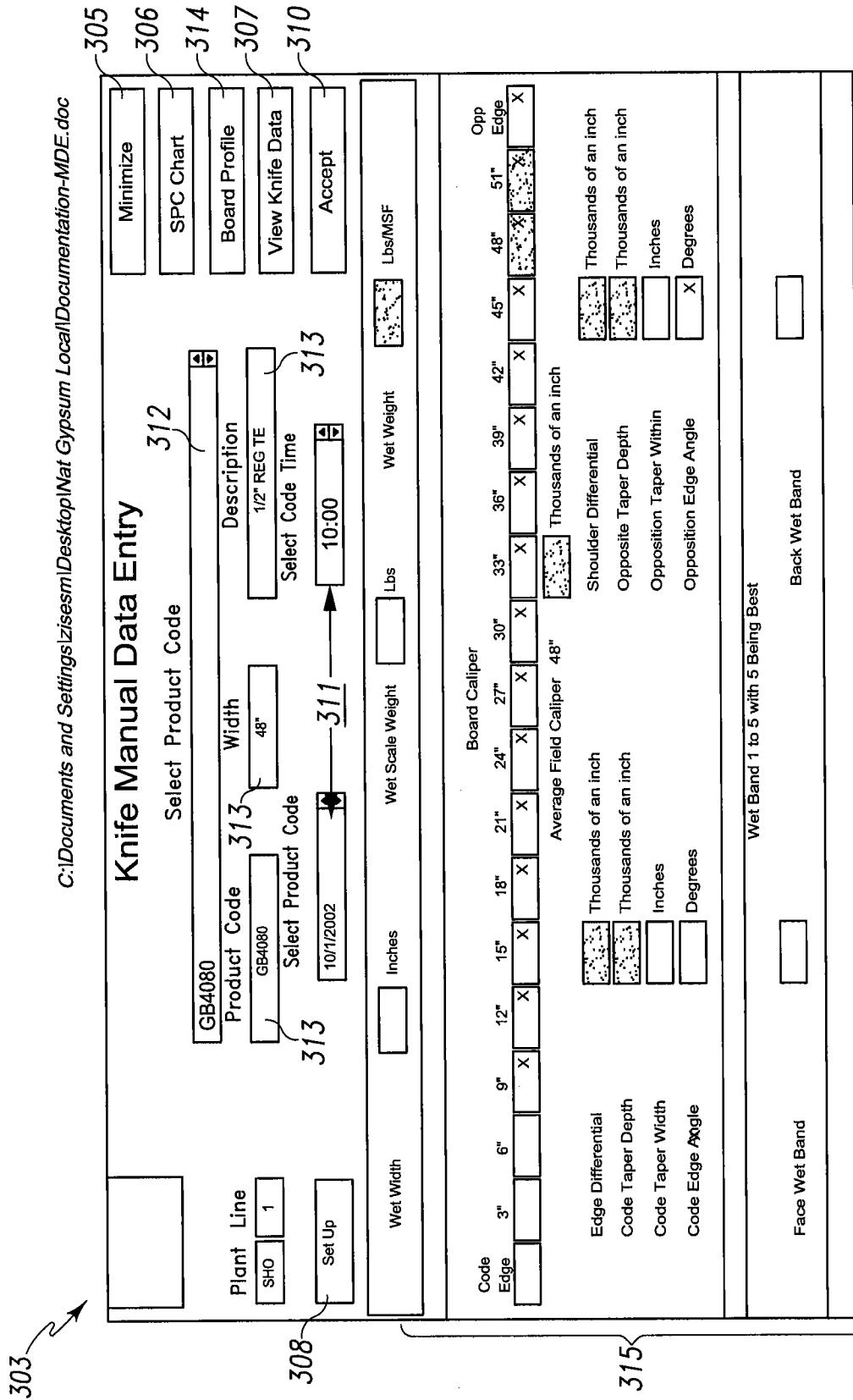


Fig. 24

304 →

LAB MANUAL DATA ENTRY							
Plant	Line	Select Product:	GB4080	Product Code	313	Description	1/2" REG TEE
SHO	1			Width	48"		
		Select Date	10/1/2002	311	Select Time	10:00:00	312
Dry/ Weight <input type="text"/> Lbs							
Transverse Strength	Face Up MD	<input type="text"/> Lbs	Face Down MD	<input type="text"/> Lbs	Face Up XMD	<input type="text"/> Lbs	Face Down XMD
Nail Pull	Test 1	<input type="text"/> Lbs	Test 2	<input type="text"/> Lbs	Test 3	<input type="text"/> Lbs	Test 4
Core Hardness	Test 1	<input type="text"/> Lbs	Test 2	<input type="text"/> Lbs	Test 3	<input type="text"/> Lbs	Average
End Hardness	Test 1	<input type="text"/> Lbs	Test 2	<input type="text"/> Lbs	Test 3	<input type="text"/> Lbs	Average
Code Edge Hardness	Test 1	<input type="text"/> Lbs	Test 2	<input type="text"/> Lbs	Test 3	<input type="text"/> Lbs	Average
Opposite Edge Hardness	Test 1	<input type="text"/> Lbs	Test 2	<input type="text"/> Lbs	Test 3	<input type="text"/> Lbs	Average
Accept <input type="checkbox"/>							

306 → 314
 307 → Board Profile
 308 → View Lab Data
 310 → Set Up

315 → 312

Fig. 25